

### REMARKS

Reconsideration of the application is requested in view of the modifications above and the remarks below.

**1. Rejection Under 35 USC 112, first paragraph**

The Office Action rejected Claims 1, 5 and 7 under 35 USC 112, second paragraph. In view of the modifications above, the rejection is believed overcome. Reconsideration is requested.

**2. Rejection Under 35 USC 102**

The Office Action rejected Claim 7 under various references. In view of the modifications above, the rejection is believed overcome. Reconsideration is requested.

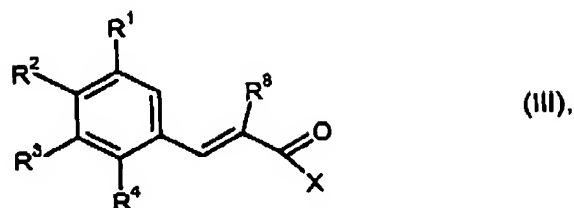
**3. Rejection Under 35 USC 103**

The Office Action rejected Claims 1-6 under 35 USC 103 over Saumitra in view of Kikukawa. The rejection should be withdrawn. It is well established that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970). The Office Action does not establish a *prima facie* case of obviousness.

Applicants' invention, as encompassed by Claims 10-15, relates to a process for preparing a compound of formula (III)

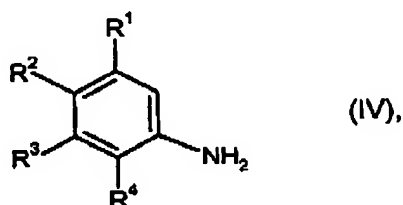
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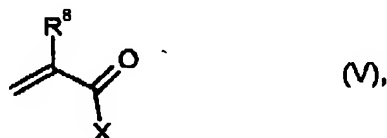


such that  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are identical or different and in each case represent hydrogen, fluorine, chlorine or bromine, at least two of these radicals being other than hydrogen and  $X$  represents  $OR^5$  or  $N(R^6)(R^7)$ , where  $R^5$  represents hydrogen or optionally substituted  $C_1$ - $C_{10}$ -alkyl, optionally substituted phenyl or benzyl and  $R^6$  and  $R^7$  are identical or different and in each case represent optionally substituted  $C_1$ - $C_{10}$ -alkyl and  $R^8$  represents hydrogen, chlorine, bromine or optionally substituted  $C_1$ - $C_{10}$ -alkyl.

The process comprises: reacting (1) an aniline of the formula (VI)

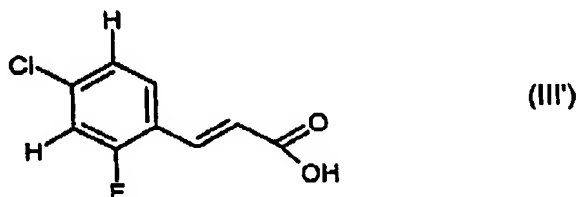


wherein  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  have the meaning indicated in formula (III) with  $A^\ominus$  sodium nitrite in aqueous sulfuric acid into a diazonium salt and reacting (2) the resulting reaction mixture with a compound of formula (V)



such that  $X$  has the meaning indicated in formula (III) and  $R^8$  represents hydrogen, chlorine, bromine or optionally substituted  $C_1$ - $C_{10}$ -alkyl, in the presence of a

homogeneous, palladium-containing catalyst at a temperature ranging from about -5 to about +100°C. In one embodiment, the invention encompasses the compound of formula (III'):



One of ordinary skill in the art following the teachings of Saumitra, singly or in combination with Kikukawa, would not have been motivated to modify the teachings of these documents, make or practice Applicants' invention, and expect the results Applicants have discovered.

Applicants' invention encompasses a novel, non-obvious and useful way to prepare and to react the diazonium salt. Applicants' invention encompasses a novel, non-obvious and useful compound. Saumitra or Kikumawa, singly or in combination fails to suggest Applicants' compound.

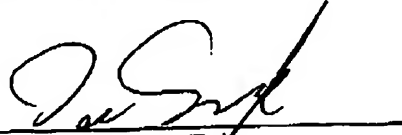
Applicants' invention, for instance, advantageously produces polyhalogen-substituted cinnamic acids and cinnamic acid derivatives in high yields in a simple manner, at low temperatures, in short reaction times, without additions of bases and without absolutely necessary additions of arylphosphanes (See Specification, page 10, last paragraph). Further, no special solvents such as dimethylformamide are needed for Applicants' process. In fact, Applicants' invention allows yields of up to 95 % (e.g., example 5), whereas the process of Saumitra allows yields of only 75 % for halogenated substrates (entries 2 and 9 of table 1, p. 1943). The yields for halogenated substrates according to Kikukawa are even lower (58 % for 2-Chlorocinnamic ester, entry 7 of table 2). Neither Saumitra nor Kikukawa, singly or in combination, contains teachings that would have motivated one skilled in the art to perform a process encompassed by the invention. Neither Saumitra nor Kikukawa, singly or in combination, contains teachings that would have motivated one skilled in

the art to make the compound encompassed by the invention. 35 USC 103 compels the withdrawal of the rejection.

In view of the foregoing amendments and remarks, allowance of Claims 10-15 is earnestly requested.

Respectfully submitted,

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